

**METHOD OF ALIGNING A SUBSTRATE, COMPUTER  
PROGRAM, DEVICE MANUFACTURING METHOD, AND  
DEVICE MANUFACTURED THEREBY**

**ABSTRACT OF THE DISCLOSURE**

5           While the alignment beam is focused on a mark on the substrate table,  
the substrate table is moved substantially perpendicularly to the alignment  
beam. If the image of the mark moves relative to a reference mark, then the  
substrate and the alignment beam are not perpendicular. The mark on the  
substrate table is aligned to a plurality of reference marks. At least two  
10   substrate marks are then aligned with a single reference mark. Errors due to  
the inclination of the alignment beam are eliminated from the expansion and  
rotation values calculated for the substrate.